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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,102

09/15/2006

Yozo Uchida

070759-0046

9358

20277 7590 10/15/2008
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EXAMINER

ZHANG, YUANDA

ART UNIT

PAPER NUMBER

2828

MAIL DATE

DELIVERY MODE

10/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,102	Applicant(s) UCHIDA ET AL.	
	Examiner YUANDA ZHANG	Art Unit 2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-39 is/are pending in the application.
- 4a) Of the above claim(s) 32-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/15/06;11/08/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 27-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada (US PG Pub 2004/0245534 A1).

3. In re claim 27, with reference to figure 2, Yamada discloses a ridge stripe semiconductor laser device comprising an active layer (6), upper and lower clad layers (4 & 8) that sandwich the active layer therebetween, a stripe-shaped ridge (8a) formed in part of the upper clad layer (paragraph [0080]), and a current block layer (protective film 15 which is made of insulating material) that covers both sides of the stripe-shaped ridge other than a top face thereof (protective film 15 covers the striped structure with exposing the top surface of the ridge) (paragraph [0081]), wherein a first electrode (12) is formed on an upper face of the semiconductor laser device, and a second electrode (pad-electrode 14) is formed on the first electrode, wherein the first electrode is made thinner than the second electrode (electrode 12 is thinner than pad-electrode 14 since electrode 12 is made of Ni/Au while pad-electrode 14 is Ni/Ti/Au, having an extra Ti layer) (paragraph [0082] & [0083]), and is so formed as to cover at least an entire area of the top face of the ridge (electrode 12 covers the entire top surface of the ridge) (see

figure 2), and wherein the second electrode is formed at a given distance away from both stripe- direction ends of the ridge (inherent, any distance).

4. In re claim 28, with reference to figure 2, Yamada discloses a multibeam semiconductor laser device comprising, on a common semiconductor substrate (1), a plurality of ridge stripe semiconductor laser portions (16 & 16'), each comprising an active layer (6), upper and lower clad layers (4 & 8) that sandwich the active layer therebetween, a stripe-shaped ridge (8a & 8a') formed in part of the upper clad layer (paragraph [0080]), and a current block layer (15) that covers both sides of the stripe-shaped ridge other than a top face thereof (protective film 15 covers the striped structure with exposing the top surface of the ridge) (paragraph [0081]), wherein a first electrode (12 & 12') is formed on an upper face of each of the semiconductor laser portions, and a second electrode (14 & 14') is formed on the first electrode, wherein the first electrode is made thinner than the second electrode (electrode 12 & 12' is thinner than pad-electrode 14 & 14' since electrode 12 is made of Ni/Au while pad-electrode 14 is Ni/Ti/Au, having an extra Ti layer) (paragraph [0082] & [0083]), and is so formed as to cover at least an entire area of the top face of the ridge (electrode 12 & 12' covers the entire top surfaces of the ridges) (see figure 2), and wherein the second electrode is formed at a given distance away from both stripe- direction ends of the ridge (inherent, any distance).

5. In re claims 29 and 30, Yamada discloses wherein a width direction length of the second electrode is longer than a width direction length of the first electrode (see figure 2).

6. In re claim 31, Yamada discloses wherein, between the plurality of semiconductor laser portions, a groove (trench 11) for electrically separating the semiconductor laser portions from each other is formed, and wherein the first electrode is formed away from the groove (paragraph [0043]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUANDA ZHANG whose telephone number is (571)270-1439. The examiner can normally be reached on Monday-Thursday, 7:30am-6:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/YZ/
10/01/08

/Minsun Harvey/
Supervisory Patent Examiner, Art Unit 2828